

Burlington Northern Livingston Shop Complex

Site Response Section



Update

November 2007

Lots of Activity at the Rail Yard

Since April 2006, the Montana Department of Environmental Quality (DEQ) has focused primarily on two areas of contamination at the Burlington Northern Livingston Shop Complex. First, DEQ required the BNSF Railway Company (BNSF) to characterize the petroleum contamination in the groundwater, conduct pilot testing of removal technologies, and install a major petroleum product recovery system in the middle of the rail lines. Second, DEQ required BNSF to characterize

volatile organic compounds (VOCs) in groundwater, soil vapors, and indoor air in and around the rail yard and to develop systems to prevent VOC vapors from entering some buildings at the Facility where vapor above screening levels have been detected. An additional step involves testing a VOC treatment technology first in a lab and then in the field. DEQ will hold a public meeting to provide information about these activities on November 28, 2007.

Petroleum Product Recovery

During the spring and summer of 2006 DEQ and its contractor, CDM, Inc., developed a work plan for testing a petroleum recovery system south of the main rail lines at the Facility. The testing involved gathering information about how to remove floating petroleum from the groundwater, as well as how to promote biological breakdown of the petroleum that is stuck to the soils associated with the groundwater. In addition, the work plan included drilling new monitoring wells to find out just where the petroleum contamination is located. DEQ gave BNSF the opportunity to carry out the activities outlined in the work plan. BNSF, through its contractor, Kennedy/Jenks, did so during the fall of 2006 with DEQ oversight. 425 gallons of product were removed from the ground during 2 months of testing.

Using the information from the testing, BNSF prepared a design for a major product recovery system. The system consists of 20 multi-use wells in the middle of the railroad tracks where most of the petroleum

contamination is found (see photo). Petroleum, groundwater, and air will be removed from the ground and piped under the tracks to a new treatment plant.



Utility corridor and wells in track area.

Public Meeting
November 28, 2007
7:00 pm
Livingston Public Library



New treatment building

The new treatment plant (see photo) located on the rail yard that will separate the petroleum from the groundwater pumped out of the ground and treat the groundwater before it is discharged.

The air removed from the ground will promote biologic activity that will breakdown the petroleum in the soils. The treatment plant also includes filters that will clean the vapors from the air as it is removed from the ground. Petroleum recovery is scheduled to begin in mid-November.

Livingston Indoor Air Investigation

After receiving preliminary data from the December 2005 and April 2006 indoor air investigations, DEQ required BNSF to determine where vapors from the Facility might be entering buildings in and around the rail yard. The investigation took place in April and June 2007. It included homes and businesses in and around the rail yard as well as over 100 soil gas probes (see photo) installed at 38 locations.



Soil gas probe installation

Preliminary data from this investigation and previous investigations indicates that vapors are likely moving from the Facility into buildings within the rail yard and nearby.

Therefore, DEQ required that BNSF prevent vapors from entering several buildings at the rail yard as well as one home. One way to reduce vapors is to install an in-home VOC-gas protection system. This works much the same way as a radon-protection system. It may include sealing concrete cracks, putting down barriers, and using ventilation systems. BNSF will install and maintain the protection systems at no cost to the home or business owner. Any system will be operated until DEQ determines through further sampling that the protection system is no longer needed.

DEQ is expanding the investigation to include many more nearby homes and businesses. This expanded investigation will be conducted this November and December.

Based upon the results of this investigation, DEQ will determine whether additional buildings require protection systems. DEQ will require this of BNSF if the investigation shows that vapors in buildings can be linked to the Facility. It is important to note that sometimes VOCs may be present in a home because of certain items in the home, such as dry-cleaned clothes, new carpet, hobby glues, paint thinners and strippers, and various household cleaners.

VOC Investigation and Pilot Test

At the same time the petroleum recovery system was being built and the indoor air was being investigated, DEQ required BNSF to install additional wells to further define the VOC contamination in groundwater.

In addition, DEQ authorized BNSF to begin testing a technology that may break down the VOC contamination and clean up the groundwater faster.

What's Next?

BNSF is also required to conduct several other activities. These activities include, among other things, investigating and evaluating cleanup options for surface soil contamination in the rail yard and

investigating possible VOC contamination in the bedrock aquifer. It is DEQ's intent to focus on the ongoing cleanup at the same time as the investigations so that the cleanup moves forward as quickly as possible.

Want more information about remedial activities at the Burlington Northern Livingston Shop Complex? Come to a public meeting at 7 p.m., Wednesday, November 28, 2007, in the Community Room of the Livingston Public Library, 228 West Callender St., Livingston.

Background

The BN Livingston Facility is located in and adjacent to Livingston. It includes the Livingston rail yard, shop complex, C&P Packing, the cinder pile area, and portions of the surrounding area. Soil and groundwater have been impacted by solvents, petroleum, heavy metals, and asbestos.

Questions? Concerns?

Contact Aimee Reynolds, DEQ Project Manager:

Phone (406) 841-5065 (direct)
(800) 246-8198 (Superfund hotline)

Fax (406) 841-5050

Email: areynolds@mt.gov

Or come to a public meeting:

7 p.m., Wednesday, November 28, 2007
Community Room of the Livingston Public Library, 228 West Callender St., Livingston

For More Information

You can review documents related to the Livingston Shop Complex, at the locations listed opposite. Recently approved documents are also available online at:

<http://deq.mt.gov/StateSuperfund/BNLivingston.asp>

Persons with disabilities who need an alternative accessible format of this information, or who require some other reasonable accommodation in order to participate in the public meeting should contact DEQ at least 3 days before the meeting.

Information Located At

Livingston-Park County Library

228 West Callender
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Telephone (406) 222-0862

Montana Department of Environmental Quality

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